5 (Amended). [The method as set forth in claim 3 wherein said allocating step includes the steps of:] A method for providing full duplex operation in a two channel audio system wherein each channel includes a plurality of band pass filters, said method comprising the steps of:

applying a first input signal to a first channel and a second input signal to a second channel;

providing an indication of the magnitude of the signal in each band in each channel; and

allocating the signals in the first channel to a first channel output and the signals in the second channel to a second channel output by:

        (a) finding the band having the largest signal;

        (b) coupling the signal to the channel output for that band and blocking the signal in the corresponding band in the other channel from the other channel output;

        (c) going to the other channel;

        (d) repeating steps (a), (b), and (c) for each next largest signal from the remaining bands.

6 (Amended). [The method as set forth in claim 3 wherein said allocating step includes the steps of:]A method for providing full duplex operation in a two channel audio system wherein each channel includes a plurality of band pass filters, said method comprising the steps of:

applying a first input signal to a first channel and a second input signal to a second channel;

providing an indication of the magnitude of the signal in each band in each channel; and

allocating the signals in the first channel to a first channel output and the signals in the second channel to a second channel output by:

        finding the band with the largest signal;

        coupling the signal from that band and from alternate bands in the same channel to the channel output for those bands;

        blocking the corresponding bands in the other channel from the channel output for those bands; and